

spirax/sarco®

Series 200 BVA Pneumatic Actuators with Spirax Sarco Ball Valves

Description

The BVA 200 Series is a range of pneumatic rotary actuators to automate Spirax Sarco ball valves for a wide range of industrial applications.

The pneumatic actuated ball valve range comprises:-

Actuators combined with three piece ball valves M10V, M10S, M10S ISO, M10F ISO and M10H ISO.

Actuators combined with one piece ball valves M20, M40 ISO and M21S ISO.

Available types

Single acting	210S, 215S, 220S, 225S 230S, 235S,
(spring return): BVA	240S, 245S, 250S and 255S
	210D, 215D, 220D, 225D,
Double acting: BVA	230D, 235D, 240D, 245D,
	250D and 255D

Technical data actuators

Maximum pressure	150 psig (10 barg)
Operating pressure range (standard)	60, 75 or 90 psig
Operating temperature range	-22°F to +212°F (-30°C to 100°C)
Operating media	Compressed air (dry or lubricated) Non corrosive gas Light hydraulic oil
Rotation 90° C	Anti-clockwise with port 'A' pressurised

Materials

No	Part	Material
1	Body	Aluminium hard anodized
3*	Pinion	Nickel plated carbon steel
4	End caps	Aluminium epoxy coated
12	'O' ring	NBR
13	Screws	Stainless steel
16	Blind nut	Stainless steel
17	Washer	Stainless steel
20	Indicator cap	Polyamide
21	Coloured indicator	Polyamide

* Item 3 not shown on this diagram

Normal ft³ / stroke

BVA actuator size	210	215	220	225	230	235	240	245	250	255
Single acting	.142	.248	.495	.813	1.201	1.978	2.967	5.298	7.063	11.301
Double acting	.248	.459	.883	1.413	2.049	3.214	4.945	8.829	12.008	18.364

Normal ft³ per open/close cycle when supplied with air at 90 psig.

Time (seconds)

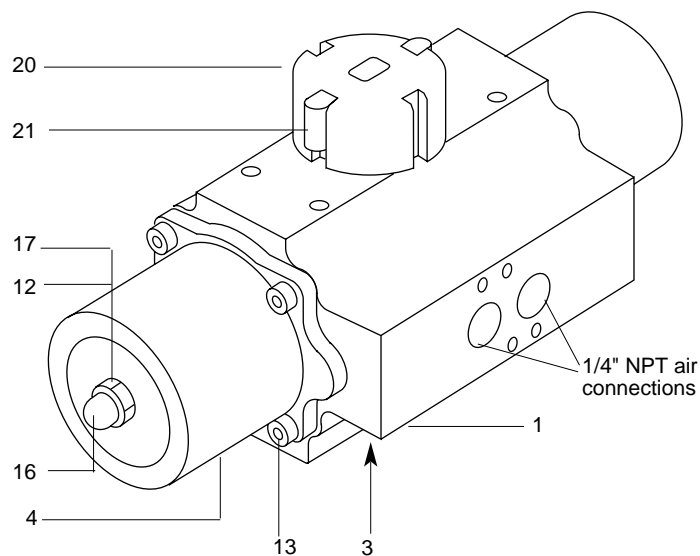
BVA actuator size	210	215	220	225	230	235	240	245	250	255
Single acting	0.11	0.20	0.27	0.32	0.50	0.70	0.90	2.20	2.30	2.80
Double acting	0.04	0.08	0.11	0.15	0.18	0.30	0.40	0.80	1.20	1.80

Typical operating time (seconds). Operating media - compressed air at 90 psig.

Note: Operating time is for valve opening

Dimensions

Refer to individual TI for dimensions.



Accessories

MV solenoid valve: a range of Namur electrical valves with an encapsulation rating to IP65 is available for use with BVA actuators. These can be used to drive actuators with compressed air, non-corrosive gas or light oil in the temperature range -14°F to 195°F.

Solenoid	Coil voltage	Power consumption (W)
MV11	240 / 220 Vac	4.5
MV12	110 Vac	4.5
MV13	24 Vac	4.5
MV14	24 Vdc	4.5

How to order

- 1 - Spirax Sarco BVA 225S actuator
- 1 - MV11 solenoid
- 1 - BVL248 linkage kit

or actuated ball valves may be supplied completely assembled to suit the application.

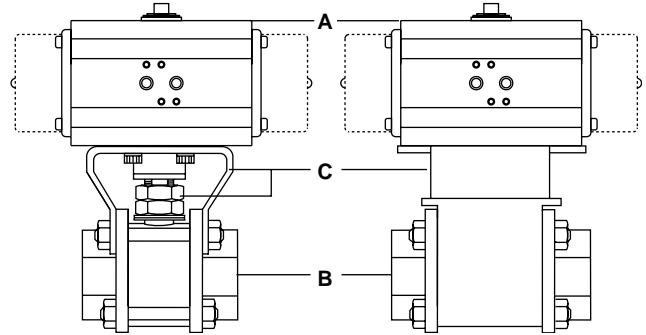
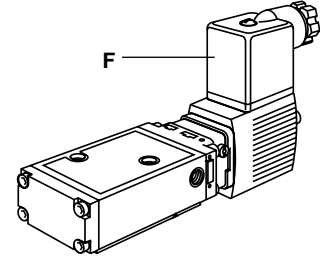
Available spares set comprises

'O' rings	9, 10, 11, 12, 18
Pinion washers	5, 8
Pinion circlip	7

State actuator model/type on order e.g. BVA 220-S

Typical assemblies

- A - BVA actuator series 200
- B - Three piece or one piece ball valve
- C - Linkage kit (BVL)
- F - Solenoid (MV)



Typical assembly for non-ISO ball valves

Typical assembly for ISO ball valves

